CLAIMS

1. A method for adjusting a resonance frequency of a vibration system having a movable body fixed to a plate spring,

wherein an additional weight that achieves a target resonance frequency is calculated in advance, and a weight corresponding to the calculated additional weight is added to the vibration system.

2. The method according to claim 1,

wherein a procedure for calculating the additional weight comprises the steps of:

fixing the movable body or a weight corresponding to a weight of the movable body to a plate spring;

applying slight vibration to the plate spring;

detecting a resonance frequency of the vibration; and

calculating, based on the detected resonance frequency, the additional weight that achieves the target resonance frequency.

3. A Stirling engine comprising:

a cylinder;

a piston and a displacer that reciprocate in a direction of an axis of the cylinder;

a displacer supporting spring elastically supporting the displacer; and

a bolt that fixes the displacer at a center of the displacer supporting spring,

wherein the displacer is fixed to the displacer supporting spring along with a washer having a weight corresponding to a calculated additional weight that achieves a target

resonance frequency.